

NOTES ON A MASS OCCURRENCE OF
LEUCOMA SALICIS LINN. (LEP.:
LYMANTRIIDAE)

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Having run one or two moth traps regularly all year round for the last 17 years, it is now rare for a night to produce anything really surprising. I still occasionally find species or varieties new to me, and particularly in May and early June after the long months of low catches, a warm, cloudy night always persuades me to rise expectantly at dawn, hopefully to see the first sphingids, notodontids and arctiids of the new high season. However, the morning of 17th July 1984 produced a phenomenon I have not come across before or heard reported.

I had been working very late, and as the night promised a good catch I decided to wait until dawn and retire to bed after scoring the catches of two traps, one a black-bulb Robinson run at my home at Bar Hill, some six miles N. W. of Cambridge, the other a standard Robinson run five miles away at the Field Station of the Department of Genetics, Cambridge University. The Bar Hill trap yielded a good catch but with nothing exceptional. However, as soon as I reached the Field Station trap it was obvious that something unusual had occurred overnight, for the ground around the trap was strewn with moths, of which about one fifth were *Leucoma salicis* (the white satin). In all I counted 157 of these moths in or around the trap.

The figures themselves are not unusual, for this trap often produces largish catches, and several species often occur in large numbers. For example, on the night in question there were 94 *Agrotis exclamatoris* Linn. and 87 *Apamea monoglypha* Hufn., while the total catch was 782 moths of 65 species. But the large catch of *L. salicis* had a number of unusual features.

Firstly, I have trapped in and around Cambridge for four years, and although present each year, *L. salicis* has never been particularly common. In 1981, six individuals, five males and one female, were recorded at the Field Station. In 1982 the count was seven male and one female, with two males also taken at Bar Hill and in 1983, again five males and one female were recorded. So the catch of 157 in one night was in itself exceptional. More unusual though, was the fact that these were the first *L. salicis* to be recorded this year. Usually the flight season of this species, as with so many others is such that the species occurs firstly in small numbers on a few nights, the numbers gradually increasing to a peak before tailing off again slowly. But in this case, following the night of the 17th, the numbers

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of *L. salicis* at the Field Station were nightly, from the 18th July, 5, 19, 9, 2, 1, 2, 0, 0, 2, 0, 1, 2, 0, 1, 0, 1, 2, 0, 0, 0, 1, 1, 0, 1, 0, 0, 0, 1, so that by 16th August the season was over.

This initial mass occurrence at the Field Station contrasts with the occurrence of this species at Bar Hill where it was first present on 18th July (two males). Thereafter, the numbers each night were 0, 2, 0, 1, 4, 1, 0, 1, 3, 1, 0, 0, 1, 1, 1, with the last being recorded on 4th August. (From 21st July, a Heath Trap was used at Bar Hill, the black-bulbed Robinson being run by Peter Kearns in his garden in Cambridge, three miles S. E. of the Field Station. He recorded two male *L. salicis* on 26th July and a further male on 27th July.)

The third unusual feature was the sex ratio. Both sexes come to light, but in the past I have always found more males than females. So, for example, over my 17 years of trapping I have recorded 1064 individuals of *L. salicis* of which 841 (79.04%) have been males. Yet of the 157 recorded on 17th July, 104 (66.24%) were female.

On first reflection there appeared to be two possible explanations, but neither seems to quite fit the facts. The phenomenon could either be explained by a mass migration, or by a co-ordinated mass emergence. The idea of a mass migration is plausible, but I feel it would have to be fairly short range and local. Firstly, because *L. salicis* did not occur on 17th July at Bar Hill, which is after all only five miles away, and was on the night in question downwind on an albeit slight breeze. Secondly, were a migration of widespread occurrence, other reports would have been mentioned on the grapevine.

The possibility of a co-ordinated mass emergence could also explain the sudden occurrence of a large number of individuals, but I can see no explanation of the 2:1 sex ratio in favour of females in the data; and again the lack of a similar catch with respect to *L. salicis* at Bar Hill makes this explanation unconvincing to me. If any reader has had similar experiences with this or other species, or has any alternative explanation of these observations, I would be grateful to hear of them.

ETHMIA BIPUNCTELLA FABR. (LEP.: ETHMIIDAE) IN WILTSHIRE.

— A single male of this moth was taken at light at Dinton (VC8), on the night of 24/25 June 1984, possibly the first record of this species for Wiltshire. It may be worth noting that my wife had planted a border with *Echium vulgare* (Viper's Bugloss), the species' foodplant, obtained as very young plants from a friend in Durrington (VC8), who had raised them from seed. However, inspection of the plants has revealed no sign of the larva, so the moth may have originated from elsewhere. — S. M. PALMER, The Warren, Hindon Road, Dinton, Wilts.